# Providence Journal-Bulletin

#### October 30, 1997

### Charlestown, Pawtucket plan ahead for next big storm

■ State officials urge other communities to follow suit by taking measures to lessen damage from a severe hurricane.

**by PETER B. LORD**Journal-Bulletin Staff Writer

WARWICK—For years experts have been warning Rhode Island that it's way overdue for a big hurricane. Yesterday two communities—Charlestown and Pawtucket—were praised by state officials for having actually done something about the next "Big One."

Charlestown appears to be the first community in the country to incorporate storm planning into their town's comprehensive plan of development.

The town already has used a \$10,000 grant to raise the level of the main access road to Charlestown Town Beach so it' less likely to be submerged during storms.

And yesterday, state officials announced the state's Emergency Management Agency is giving the town \$108,000 to start showing property owners how they can protect the hundreds of houses in flood-prone areas along the town's barrier beaches and ponds.

State officials yesterday touted both communities as models for the kind of planning they want to see done in all of Rhode Island's communities during the next three years.

"We want people to know that money is coming down from Congress for local hazard mitigation efforts and they should put together plans like the ones in Charlestown and Pawtucket," said Raymond LaBelle, director of the state's Emergency Management Agency.

As part of the new efforts, the state will soon distribute weather radios to each of the state's school superintendents, LaBelle said.

And just last spring, the state building code was amended to require that new structures are built with protection against damage from high winds, which can rip roofs off buildings and buildings off foundations.

About 140 local officials attended a conference on local storm planning at the Inn at the Crossings sponsored by the state Emergency Management Agency, the insurance industry and the University of Rhode Island's Coastal Resources Center. The state has hired the CRC to help towns prepare their storm plans.

Because of the billions of dollars in damage caused by Hurricane Andrew in Florida and the Midwest floods recently, there's a new push on by insurance companies and federal disaster officials to help communities do something to prevent damage from future storms, said Virginia Lee of the Coastal Resources Center.

In Rhode Island, state officials focused their initial efforts on the South County shoreline and the Blackstone Valley, Lee said. Both areas face major storm impacts in different ways: South County can expect heavy seas, while the Blackstone Valley's big concern is flooding.

David Vallee, a hydrologist with the National Weather Service, warned the disaster experts that it's been a long time since they've seen a really severe storm.

"We haven't had a direct hit since 1960—Hurricane Donna," Vallee said. "Think of all the construction that's happened since then."

The last era of major storms was in the 1950s, he said. Hurricane Carol in 1954 left 19 people dead, caused \$90 million in damages and obliterated the summer colonies in Misquamicut and Weekapaug. Twelve days later, Hurricane Edna caused less damage but knocked out power and communications. The next year, Hurricane Diane dropped 6 inches of rain, triggering the worst flood in the state's history. The Blackstone River spread 1 1/2 miles

wide, two people were killed and damages topped \$170 million.

Although the storms since then have been comparatively minor, Vallee said experts believe hurricanes are cyclical and the big ones will return.

Two more-recent hurricanes, Bob and Gloria, were really just tropical storms when they reached Rhode Island, Vallee said.

A survey of marinas on Narragansett Bay showed none could stand up to a real hurricane, Vallee said. "Boats will become lawn ornaments."

He said the communities along the Pawtuxet River—Scituate, Cranston, Coventry, Warwick and West Warwick—should consider creating a flood warning system.

"Does anyone have a plan is the dam at the Scituate Reservoir lets go?" he asked.

Pam Pogue, who heads the storm planning efforts at URI, said officials should be concerned about the state's 1,000 bridges and 400 dams. Many are in disrepair.

Charlestown Planner Nancy Hess said her community has adopted its hazard mitigation plan into its town comprehensive plan, so the town can try to avoid allowing new developments in flood-prone areas and it can beef up bridges and culverts.

The town plans to make a video advising people how to strengthen their houses, to elevate two houses as demonstration projects, and increase its tree-trimming efforts so downed trees don't close roads.

Along the town's beaches the new plan recommends dune restoration efforts and retrofitting bathhouses. It calls for dredging the Charlestown Breachway, creating fire lanes in Burlingame State Park, inspecting local dams and posting flood stage markers.

# Providence Journal-Bulletin

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#### Business as usual doesn't work with Mother Nature

## By RAYMOND LABELLE and PAM RUBINOFF

We are in the midst of the hurricane season and Rhode Islanders once again expect to be spared "The Big One." But it is not usual for the Ocean State to escape hurricane season unscathed. Rhode Island is known to have experienced at least 15 hurricanes in the 20th century. Although the past 35 years have seen a relative lull, the devastation from seven major events in the 1938-61 period (all of which hit in August and September) should be remembered as we enjoy the end of our summer season.

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The National Weather Service and atmospheric scientists warn that we will see more frequent and intense hurricane activity over the next quarter century, like last year's record number of hurricanes for the Atlantic season. In recent years, the United States has suffered a series of increased natural disasters: earthquakes on the West Coast, floods in the Midwest and hurricanes in the Southeast have devastated communities, costing billions of dollars for clean-up and rebuilding, bankrupting insurance companies and draining government coffers

Here in Rhode Island we have become complacent in our practices. Despite over \$300 million in damages and over 200 lives lost from the hurricanes of 1938 and 1954, we have rebuilt in many vulnerable areas. Hundreds of buildings are in high flood zones and on the front line of the next large storm surge. Most coastal residents and tourists have not experienced a major storm event and therefore have no experience in preparing for or responding to natural disasters. Over 80,000 Rhode Island residents live in areas susceptible to flooding, and property valued at over \$83 billion is at risk from coastal flooding and wind storms. Our economy is also extremely vulnerable to natural disasters - Hurricane Bob, which struck the northeast coast in August of 1991, caused over \$ 60 million in marine losses alone; the Great Blizzard of 1978 resulted in an estimated \$10 million in lost production and wages. Clearly with such experience, cost and knowledge, we can't continue to do business as usual.

Averaged over the past 20 years, natural disasters have cost the United States one-quarter billion dollars each week; emptying our pockets-in one way or another-through increased insurance premiums, taxes or a higher cost of doing business. Such costs are not sustainable by either the public or private sector, or the public at large. Imagine going to your insurance company to collect payment after a Hurricane Andrew-type storm only to find that they have gone bankrupt. Will state government then bail you out with taxpayer - funded insurance pool? No. The Rhode Island budget is already depleted, with no

pool of funds left to pay for the clean-up of another natural disaster.

The federal government, equally challenged with the call for fiscal responsibility, has been given a wake-up call. The past few years of payouts for natural disasters nationally has proved that the current cycle of building, insuring and rebuilding again in vulnerable areas is not sustainable economic or social policy.

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The new motto of the Federal Emergency Management Agency (FEMA) - Hazard Mitigation is the cornerstone of the emergency management - reflects a different way of doing business, where resources and funds are being allocated to prevent damages before

disaster strikes. Proactive measures such as flood-proofing the first floor of town hall, or acquiring vulnerable shorefront land for open space, can significantly reduce the cost of cleanup and rebuilding, while reducing the emotional toll that a community suffers when hit by a natural disaster.

Over the past year, the University of Rhode Island's Coastal Resources Center, Rhode Island Sea Grant and The Rhode Island Emergency Management Agency have worked with FEMA, various state agencies, numerous local officials and a broad spectrum of private industry to establish a framework for developing strategies to minimize vulnerability to natural hazards. Prior to this effort, there was no mechanism in Rhode Island for local and state agencies to work together in a proactive way to reduce damages and costs from natural disasters.

Although we may not have control over the cause of disasters, we certainly do have the ability to reduce our risks and protect our investments in the development and in the economy of Rhode Island. Local officials in South County and the Blackstone River valley have begun to identify risks to their communities - municipal buildings in floodplains, inadequate shelters evacuations and/or increased conversion of seasonal cottages to year-round homes in disaster-prone neighborhoods. Creative actions are being developed to mitigate or reduce these risks through education, awarding grants for retro-fitting existing structures or providing incentives that encourage residents to build wisely. Many improvements at the government or homeowner level can be made at little or no up-front cost if thought out carefully and combined with other ongoing projects.

Rhode Islanders do have a choice: plan now or pay later. As federal dollars for disaster assistance dry up and insurance policies become harder to obtain, there may not be a choice unless proactive planning takes place. Homeowners can take this time to assess their own vulnerability. Do you

have hurricane shutters? Can you install hurricane clips on your roof when you repair it? do you know where your local shelter is? Did you ask your Realtor if your new home is in a flood zone?

Behind the scenes, research at the University of Rhode Island contributes to our ability to reduce losses from natural hazards. Results from research on ocean temperature and hurricanes at the Graduate School of Oceanography have been incorporated into a new hurricane prediction model, giving us greater opportunity to protect ourselves from impending storms. For decades, the URI Geology Department has been the primary source of information on the coastal processes along our changing ocean beaches and Narragansett Bay shoreline. This research is much more than academicit builds a foundation of information to help state and local officials make appropriate decisions and guide wiser development along vulnerable areas of the coast.

Public-private partnerships will be key the success of hazard mitigation, specifically among the sectors of insurance, building, banking and real estate. The insurance industry, through the work of the Insurance Institute for Property Loss Reduction trade association, is working with Island's Hazard Partnership so that government and business work cooperatively to everyone's benefit. By developing incentives for hazard mitigation for homeowners, business and government, there is the potential for the type of win-win collaboration between economic and environmental concerns that have been so rare in the past. The opportunity to implement community-based approaches for addressing natural hazards, complete with public-private partnerships, will serve as a models and provide the building blocks for statewide program for hazard mitigation.

The Rhode Island experience can also contribute valuable tools for other regions worldwide to promote hazard mitigation in the practical way that saves lives and money, and eliminates or reduces unneeded disruption to communities, while contributing to behavior of sustainable development in vulnerable areas. We are finally learning that business as usual will not succeed when one is dealing with Mother Nature.

- Raymond LaBelle is executive director of the Rhode Island Emergency Management Agency. Pam Rubinoff is a coastal management specialist at the University of Rhode Island's Coastal Resources Center and the Rhode Island Sea Grant program.

## Providence BUSINESS NEWS

September 29 - October 5, 1997

## Insurance agents wary despite dearth of storms

In case you haven't noticed, we're more than halfway through hurricane season and no major storms have affected the Northeast.

Still, many of the Ocean State's insurance agents are holding their breath as we proceed through the annual tropical cyclone season, which runs from June until mid-November, and can produce storms with winds upwards of 74 mph.

"My insurance agency actually goes out over water...whenever there's a hurricane we take everything that is not heavy out of the building," said Matthew F. Clark, president of Meredith & Clark Inc. in Jamestown. "Since 1984 we've evacuated the building three times...we basically leave the desks."

"We're holding our breath because it has been relatively calm season around here, although El Nino is wreaking havoc in California," said Margaret Sheehan, director of communications for the Institute for Business & Home Safety in Boston.

The IBHS is an insurance industry organization that focuses on reducing the impact of natural disasters. The organization changed its name in August from the Insurance Institute for Property Loss Reduction.

Last week IBHS sponsored a demonstration with the University Rhode Island to show homeowners how they can try to minimize property damage. The demonstration included tips on installing hurricane clips, which help secure a roof during high winds, and fastening roof shingles. The home used for demonstrations will also be used for

future training by the Hazard Mitigation Project and Rhode Island Building Commission.

"We must build smarter, stronger and safer structures. By doing so we will save lives, reduce the high cost of repetitive property damage, and along the shore protect what little is left of a fragile coastal habitat. It's a classic case of pay now, or pay later," stated Pam Pogue, manager of the Hazard Mitigation Project.

for the most part, many Rhode Island insurance companies start their education campaigns earlier in the year.

"There's a lot of information out there, but it's already been distributed. We're in the reminder stage," said Evertt Federici, executive vice president of the Independent Insurance Agents of Rhode Island.

Included among the information insurers distribute are safety tips, and reminders to move belongings that are in risky areas, such as basements that flood. Also, they remind clients that flood coverage is not offered through normal property insurance. Flood coverage must be purchased through a national program, which pays flood claims even if the president does not declare a disaster.

FEMA only provides flood assistance if the president declares a disaster, and in those cases assistance is only awarded about 50 percent of the time.

"Even though Rhode Island has been extremely fortunate in the last years, it can happen at any time," Federici said. Projects such as the one conducted by IBHS, he said, "should be a wake-up call to everyone that good construction is what they're after."

In the last decade hurricanes have caused more damage locally, mostly because building along the coast has increased, according to several industry experts.

For instance, in 1991 Hurricane Bob cost Rhode Island insurers about \$106 million, according to statistics from the Division of American Services Group. The Federal Emergency Management Agency paid out even more money for damages caused by Bob.

"From strictly a personal standpoint, I had a difficult time placing...homeowners insurance for waterfront property as of July 1, 1993," Clark said. "That was because of Hurricane Andrew," which struck the area in 1992.

Reinsurance companies help firms such as Meredith & Clark cover losses that exceed what they can cover in a particular year.

Clark himself offers new customers with waterfront property insurance through Rhode Island Joint Reinsurance Association, which is a sort of an assigned risk pool for homeowners. Such policies cost about 30 percent more than typical insurance, he estimated.

# Providence Journal-Bulletin

November 2, 1997

### Storm knocks out power to thousands of homes

By ARIEL SABER Journal-Bulletin Staff Writer

Pounding rains and winds yesterday knocked out power to thousands of homes in the region, flooded a few streets, and toppled the frame of a three-story apartment house.

By 10 p.m., nearly  $1^{1}/_{2}$  inches of rain had fallen on Rhode Island, and the National Weather Service had issued a high-wind warning for Washington and Newport Counties.

The service said east winds would reach speeds of more than 60 mph before diminishing around midnight.

In cities and towns around the state, the wind detached tree branches and ushered them into houses and cars, but there were no reports of serious injuries.

Debbie Peckham, 33, of Newport was driving along Rhode Island Avenue, near Old Beach Road, in Newport, at around 4:50 p.m. when a branch fell on her car, crushing the roof, the police said. She was taken to Newport Hospital, where she was treated for neck injuries and released, the police and a hospital official said.

The storm didn't discriminate.

Newport police officer Eric Adkins was driving to a house on Gibbs Street in response to a complaint of a fallen tree when his cruiser was struck by a wind-blown branch. The headlight was shattered, but he escaped injury.

The wind left perhaps its biggest footprint on a lowincome apartment house under construction on Bellevue Avenue near Dexter and Streets, Cranston in Providence's West End. The skeleton of the building, which is being built by the West Elmwood Housing Development Corporation as part of its Operation Hope Renewed project, collapsed last night and fell to one side.

The structure, which appeared to have been about three stories high, was reduced to a jumble of wooden planks, fallen metal scaffolding and upended granite slabs. The massive gabled roof sat atop the debris, tilting to one side.

No one was hurt.

Police cruisers blocked off the street last night in case more scaffolding broke loose.

In Newport, police shut down a street for another reason: coastal flooding. The combination of relentless rainfall and high tide turned Harrison Avenue, in the city's Ten Mile Drive area, into a lake, said Lt. Wayne Morrison. Officers closed the street at about 8:20 p.m.

A windsurfer in waters off Ruggles Avenue in Newport gave his friends a scare when he didn't show up as planned at Easton's Beach at about 1:30 p.m.

Newport fire crews searched the coastline and found the man an hour later sitting alone on a beach near where he had launched. Coast Guard Petty Officer Mike Hathaway said the windsurfer had tried to do battle with a stiff easterly headwind but soon surrendered.

Electric company spokesman could not say exactly how many households in Rhode Island and Southeastern Massachusetts had lost electricity over the course of the day. But they offered a very rough estimate of 6,000.

About 850 households in Newport - one of the hardest-hit areas - remained without electricity as of 10 p.m. last night. Electricity was expected to be restored by midnight.

In East Providence, police said the storm set off burglar alarms at a few businesses and sent a tree branch onto a house on Mauran Avenue.

Heavy surf in Jamestown was pounding a sailboat onto the shore at the Conanicut Marina. "It's almost in the parking lot," said a witness.

With reports from staff writer Michael Corkery. ■

# Hazard Mitigation Project retrofits Warwick house



Stopping by to check on the progress at 14 Pell Avenue September 20 are, from left, Pamela Pogue of the University of Rhode Island, Diana McClure of the Institute for Building and Home Safety (IBHS), Ted Sarno of the Warwick Building Dept., Peter H. Billing of IBHS, state Deputy Building Commissioner Daniel DeDentro and Ronald Reedy of the Construction Specifications Institute.

Volunteers retrofitted a Warwick home September 20 to provide examples of what homeowners can do to protect against substantive damage from the high winds and potential flooding of hurricanes and northeasters.

Volunteers and materials were provided by Home Depot, the Institute for Building and Home Safety (IBHS) and the Warwick Building Dept. Under the direction of the Rhode Island Hazard Mitigation Project, volunteers replaced the roof and retrofitted against wind damage by installing hurricane clips and sheathing with adhesives to secure the roof and roof covering. A temporary plywood hurricane shutter was added to a front window, the front entry door was reinforced with additional bolts and latches, and anchor bolts were installed to tie the house down to the foundation.

To mitigate flood damage from hurricanes and winter storms, flood barriers were put in around all basement windows at the back of the house.

The house is located at 14 Pell Avenue and will be used for demonstration and public education, according to Peter H. Billing, director of codes and standards for IBHS.

RIBA participates in the Rhode Island Hazard Mitigation Project, which also includes state and municipal agencies and insurance companies.

Rhode Island's property/casualty insurers in the R.I. FAIR Plan underwrote the retrofit through the R.I. Joint Reinsurance Association.

No new members were approved in October because the monthly Board of Directors meeting was preempted by the RIBA Annual Meeting.